ling the display by means of the controller. In the intermediate state, one or more sections of the flexible display that are oriented outwardly, away from the kernel, are generally visible from the exterior point of view. Visual information content can be provided on a visible part of the display by selecting and addressing the corresponding pixels in said visible part.

[0033] In the depicting state, shown in FIG. **3***c*, the flexible display **2** is further deformed by an additional unwrapping action. In particular, a second curve section between a curve end point **12** and the first end of the flexible display **2** has been flattened, so that substantially the entire depicting side of the flexible display **2** is flat, visible from the exterior point **10** and visual information content is controlled by the display controller. Here, the second curve section serves as a second hinge.

[0034] Preferably, the display unit **1** is arranged such that the flexible display **2** is more or less secured in the intermediate state to provide a stable mechanical state of the unit **1**. Thereto, the unit further comprises a stabilizer for enabling a stable mechanical position of the flexible display after deformation to the at least one additional operating state. It is noted that a corresponding rollable display can also be arranged such that the intermediate state is more or less stable, e.g. by providing more or less telescoping supporters having an intermediate stable position.

[0035] The additional state is for use in crowded environments and for having a good grip on the unit **1**. Possible applications, that can be used in the intermediate, partial unwrapped state, are consulting sms and/or e-mail messages, phone contact list, and mp3 play list and volume control.

[0036] The display **2** comprises rigid and flexible sections to facilitate deformation of the display **2**. In particular, the curved sections of the flexible display **2** in FIG. **3**A, the hinges, are flexible. However, also flat sections of the display **2** in FIG. **3**A can be manufactured from flexible display material. Further, the display can be provided with a sequence of hinges and flat sections, arranged in an alternating manner. As such, the display may comprise two hinges wherein a flat section is located between the hinges, or more hinges, e.g. three hinges wherein between subsequent hinges a flat section is located. By flattening some, not all hinges, an intermediate state of the display unit can be obtained. By flattening all hinges, the entire display is unwrapped and brought into the depicting state.

[0037] Curve end points **8**, **9**, **12** are provided with a deformation detector for detecting the deformation of the flexible display **2** to the at least one additional state and for generating a detecting signal. By providing a deformation detector the state of the flexible display **2** can be determined, especially which depicting side area of the display **2** is visible from the exterior point **10**.

[0038] Optionally, the display unit further comprises a display processor that is arranged to control visual information adapted for the at least one additional state of the flexible display **2**. In particular, the display processor is arranged to control visual information on a substantially flat and visible part of the flexible display **2** from the exterior point **10** in response to a detecting signal of the orientation detector. In this way, the visual information is automatically shown on the visible part of the display **2** after performing the first unwrapping action. Alternatively, the visual information is shown on the visible part upon an additional user action, e.g. via a user interface.

[0039] It is noted that the process of depicting the visual information can be caused by hardware components and/or by software.

[0040] Further, the deformation detectors can be provided with lock and/or unlock functionality or another appropriate user interface action, such as page up/page down, see below.

[0041] The deformation detectors can each be implemented in various manners, among others as a:

(i) Hall sensor generating a signal proportional to the distance of magnet to the sensor when the magnet is close enough. The sensor can typically be integrated in the border edge around the display **2**;

(ii) potential meter integrated in the curving zones in order to detect the position of the curving zone by a resistance measurement circuit, being an analogue measurement of the curving state of a flexible section and can optionally also be used to detect intermediate states during (un)wrapping actions;

(iii) light sensor detecting if a part of the display is unwrapped, being a typical digital measurement integrated in the border edge of the display;

(iv) pull strip or piezo element, the 'pull strip' changing its resistance depending on the strain (elongating or compressive) exerted on the strip. The strip can be integrated in the curved sections of the display **2**. The piezo element works in a similar manner;

(v) reed relais being a digital switch that can be switched by a magnetic field. The reed relais can be integrated in the border edge of the display **2**.

[0042] As a result, the deformation detectors can comprise an electronic measurement sensor and/or a magnetic field sensor.

[0043] In FIG. **3***b*, the user interface **11** is still covered by the part of the display **2** that is wrapped and cannot be used. This can be solved by adding limited user interface functionality on the other side of the device body or on the top and/or bottom of the display unit **1**. The limited user interface could specifically be designed for operating the display unit in its partially unwrapped state, the additional operative state.

[0044] In terms of functionality, a simple user interface can be added on the kernel **5** that is brought in the partially unwrapped state. This user interface can be dedicated for use of the partially unwrapped display part. As an example, it can be a simple four-way button that can be used to scroll through item lists on the display.

[0045] Further, in terms of functionality, a keyboard can be added. This is in particular advantageous as the unit in its partially unwrapped state is an ideal configuration for typing as the user can hold the unit in this configuration in an easy way in on or both hands. This would make the partially unwrapped state the 'typing mode' of the unit and the completely unwrapped state the 'reading mode'. The applications could be configured in such a way that they automatically switch to the typing mode when the user switches to the partially unwrapped state. For example, when reading e-mail, going the partially unwrapped state automatically triggers the reply action. The same can be done in the sms application. The keyboard can also contain four navigation keys for navigation to an on-screen list of items.

[0046] In general, user interface elements can be located on a front and/or back surface of the flexible display, on or opposite to the depicting side, on side sections, on a top and/or on a bottom section of the display unit **1**.

[0047] Practically, a user interface can be implemented by adding a display **14** with touch screen **15** to the unwrapped